J. Serafim, Jr., of the National Malaria Service, for assistance rendered during the captures made at Cururipe.

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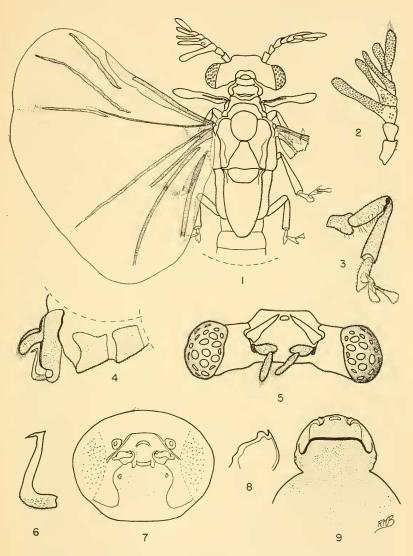
## A NEW SPECIES OF HALICTOPHAGUS PARASITIC ON CERCOPIDAE

## (Strepsiptera, Halictophagidae)

By RICHARD M. BOHART, University of California, Davis California

Three stylopized specimens of the spittlebug genus *Phila-ronia* were recently called to my attention by Dr. P. W. Oman. A mature male in its puparium and 2 female specimens were dissected from the cercopids and proved to be *Halictophagus* of a new species similar to the relatively common *H. americanus* Perkins, which parasitizes several genera of leafhoppers. I believe this is the first report of stylopization in the spittlebugs and, with many records from the membracids, cicadelloids, and fulgoroids, all the main groups of the Series Auchenorrhyncha except Cicadidae are now known to be hosts of Strepsiptera. No records have been made of stylopization in the Series Stenorrhyncha.

The discovery of parasites in Cercopidae is of particular interest as it arouses speculation as to the manner in which the Strepsiptera enter the host. Presumably, in all of the species on Homoptera the first larvae must attack the nymphal host. In the cercopids this would involve penetration of the "spittle" mass.



Figures 1-9, *Halictophagus philaroniae*, n. sp. Figure 1, male, with right wing and end of abdomen omitted, antennae shown in 2 views; 2, left antenna showing disposition of sensoria; 3, right hind leg; 4, side view of genital capsule and last 2 sternal plates; 5, ventral view of head; 6, aedeagus; 7, end view of cephalotheca; 8, ventral view of left female mandible; 9, cephalothorax and basal collar of female, ventral view.

Type material of the species described below is in the U. S. National Museum.

## Halictophagus philaroniae, new species

MALE.—Antenna moderately compact, segments 3-6 with basal lengths nearly equal, first two segments with a few bristles but no sensoria, other segments with many sensoria, third segment with only a few sensoria in a single irregular row around base (fig. 2); mandible tapering to a point; palpus a little longer than mandible, without obvious sensoria; compound eye with about 25 facets visible in dorsal aspect. Thoracic structure in dorsal view and wing venation as shown in figure 1; fore tibia about 4.5 times as long as wide at apex, about as long as either fore coxa or fore femur; fore metatarsus pyriform in outline; middle coxa about three-quarters as long as middle femur which is equal in length to tibia; hind leg as in figure 3, all coxae with conspicuous bristles, especially toward base beneath. Sternites II-V with partially fused pigmented median spots, sternites VI-VIII with single median spots; terminal segments of abdomen and aedeagus in lateral view as in figures 4 and 6. Length of anteuna 0.55 mm., breadth of head 0.61 mm., length of metanotum 0.96 mm.

MALE CEPHALOTHECA.—Proportions as in figure 7. Upper mouth margin not reaching mandibles laterally; mandible with a moderate apical tooth opposed by a broad hump. Breadth of cephalotheea 0.58 mm.

FEMALE.—Cephalothorax orange brown; collar orange brown toward base, yellowish brown toward apex. Mandible with a sharp tooth at inner apex opposed by a prominent hump (fig. 8); brood passage opening with a thick lip-like margin, connected with lateral margins of cephalothorax by thickenings; basal collar cape-like, two-thirds as long as cephalothorax. Abdomen apparently with 2 brood passage openings. Width of cephalothorax 0.42 mm., proportions as in figure 9.

TYPE (U. S. National Museum No. 57982).—Male, Valentine, Nebraska, July 23, 1945, dissected from puparium in *Philaronia bilineata* (Say) collected on grass.

PARATYPES.—One female, same data as type; 1 female, Fort Robinson, Nebraska, July 23, 1945, dissected from *Philaronia bilineata* (Say) collected on grass.

In my key to *Halictophagus*<sup>\*</sup> this species runs to *americanus* Perkins. In the male, *philaroniae* is somewhat larger (1.4 mm. long to apex of postscutellum instead of about 1.0 mm.); the posthumbium is longer; the third antennal segment has fewer sensoria toward the base, with only a single irregular row around the base instead of 2 rows or more in *americanus*; and the scutellum is narrowly separated from the prescutum. The female differs primarily in the narrower and more definite hump opposite the apical mandible tooth.

<sup>\*</sup>Bohart, R. M. 1943. New species of *Halictophagus* with a key to the genus in North America. Ann. Ent. Soc. Amer. 36:341-359.